

## Vermont Mental Health Performance Indicator Project

DDMHS, Weeks Building, 103 South Main Street, Waterbury, VT 05671-1601 (802-241-2638)

### MEMORANDUM

TO: Vermont Mental Health Performance Indicator Project  
Advisory Group and Interested Parties

FROM: John Pandiani and Monica Simon

DATE: December 13, 2002

RE: Access to Adult Mental Health Services: Specified Target Populations FY99-FY02

Last week's PIP provided service utilization rates for the adult mental health service component for FY1999 through FY2002. Information was provided for the state as a whole and for each of Vermont's ten community service areas and for age and gender groups statewide and within each region ([www.state.vt.us/dmh/Data/PIPs/2002/pip120602.pdf](http://www.state.vt.us/dmh/Data/PIPs/2002/pip120602.pdf)). This week's PIP provides adult mental health service utilization rates for people in four specified target populations for the state as a whole and within each service area for each of the four fiscal years. The four special populations under examination include adults:

- with depression,
- with serious mental illness,
- who had recently been in trouble with the law,
- and adults who were Medicaid eligible.

Our previous report on utilization rates for adult special populations ([www.state.vt.us/dmh/Data/PIPs/2001/pip012601.pdf](http://www.state.vt.us/dmh/Data/PIPs/2001/pip012601.pdf)) also included CMHC utilization rates for adults who had recently been hospitalized for behavioral health care. That information is not included in this report because the State of New Hampshire is currently not willing to share hospital discharge data with the State of Vermont. Since a substantial amount of inpatient behavioral health care services to residents of eastern Vermont are provided by New Hampshire hospitals, utilization rates for this important, high-risk population are not being reported at this time.

In each case, the number of adults in the specified target population who received services was compared to the number of adults in this target group who reside in the region and the result is expressed as a percent (For more detail, see the Methodological Note at the end of this memo. For a broader overview of this approach to measuring access to care see our recent paper in the journal, *Evaluation and Program Planning*<sup>1</sup>). For purposes of this analysis, the adult mental health component is defined to include Adult Mental Health Outpatient Programs and Community Rehabilitation and Treatment Programs. The results are presented in tabular and spider diagram formats for each year as specified in the Recommendations of the PIP Advisory Group ([www.state.vt.us/dmh/Data/PIPs/pipsrecommendedbyadvisorygrp.htm](http://www.state.vt.us/dmh/Data/PIPs/pipsrecommendedbyadvisorygrp.htm)). In addition, graphs designed to identify any changes in access to care for the four special populations during this four-year period are provided.

As you will see, CMHC adult mental health programs served almost 18% of Vermont residents with serious mental illness per year during FY2002. This proportion varied from more than 30%

of Northeast Kingdom residents with serious mental illness to less than 13% of Chittenden County, Lamoille County, and Southeastern Vermont residents with serious mental illness.

CMHC adult mental health programs served almost 6% of all adults charged with a crime statewide during FY2002. This proportion varied from 9% of adults charged with a crime in Northwestern Vermont to less than 4% of adults charged with a crime in Orange County.

CMHC adult mental health programs served almost 6% of the estimated number of adults with depression, statewide, during FY2002. This proportion varied from almost 12% of adults with depression in Addison County to less than 3% of adults with depression in Lamoille County.

Finally, CMHC adult mental health programs about 6% of all Medicaid enrollees, statewide, during FY2002. This proportion varied from more than 9% of Medicaid enrollees in Bennington County to less than 4% of Medicaid enrollees in Washington County.

We believe that the utilization rates presented here, in combination with the utilization rates presented last week, provide a very powerful measure of the accessibility of community mental health programs to members of the general population and to members of the special populations that were identified by the PIP Advisory Group. We will be very interested in learning if and how people use these data in their work. As always, we look forward to comments and questions to [pip@ddmhs.state.vt.us](mailto:pip@ddmhs.state.vt.us), or 802-241-2638.

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#### METHODOLOGICAL NOTE

**ADULTS WHO HAD RECENTLY BEEN IN TROUBLE WITH THE LAW:** Utilization rates were determined by analyzing the relationship between the community treatment data set described above and data sets that include records of all criminal charges for FY1999 through FY2002 that were obtained from the Vermont Center for Justice Research. As described above, the rate of utilization of community mental health programs by people in this special population was determined by dividing the number of people represented in both data sets by the total number of people represented in the criminal justice data set.

**ADULTS WITH SERIOUS MENTAL ILLNESS:** Utilization rates are based on a comparison of the estimated number of people with serious mental illness who reside in each service area with the number of people with serious mental illness who were served by each community mental health program. The estimate of the prevalence of serious mental illness was based on procedures published in the Federal Register on June 24, 1999. The number of people with serious mental illness who were served is the number of people served by the community programs for people with severe and persistent mental illnesses (CRT programs) during FY1999 through FY2002.

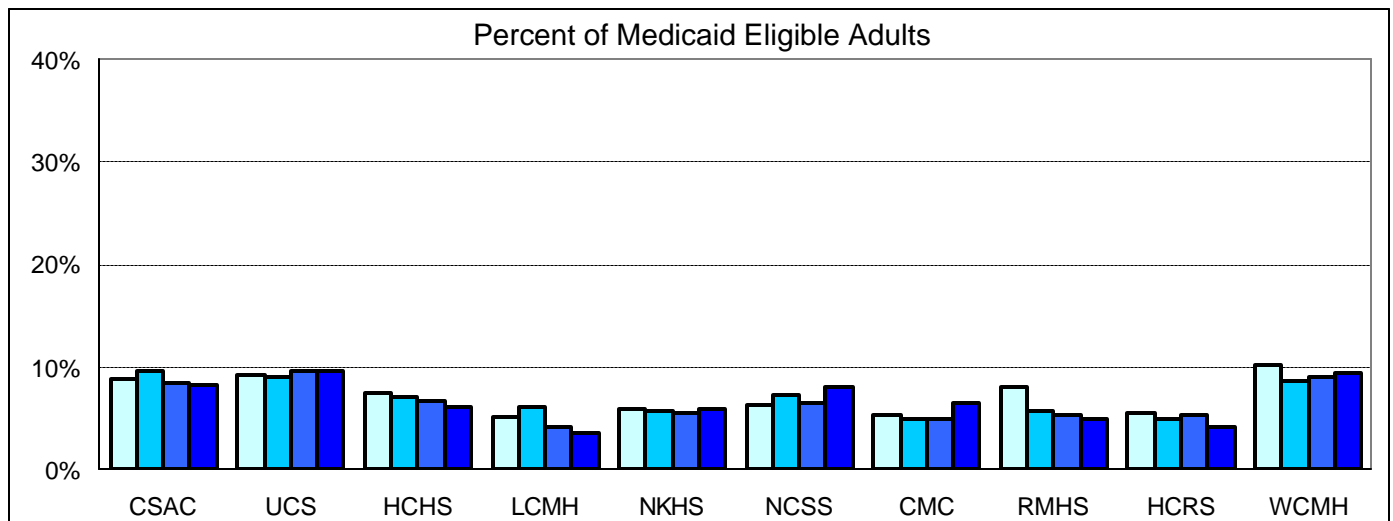
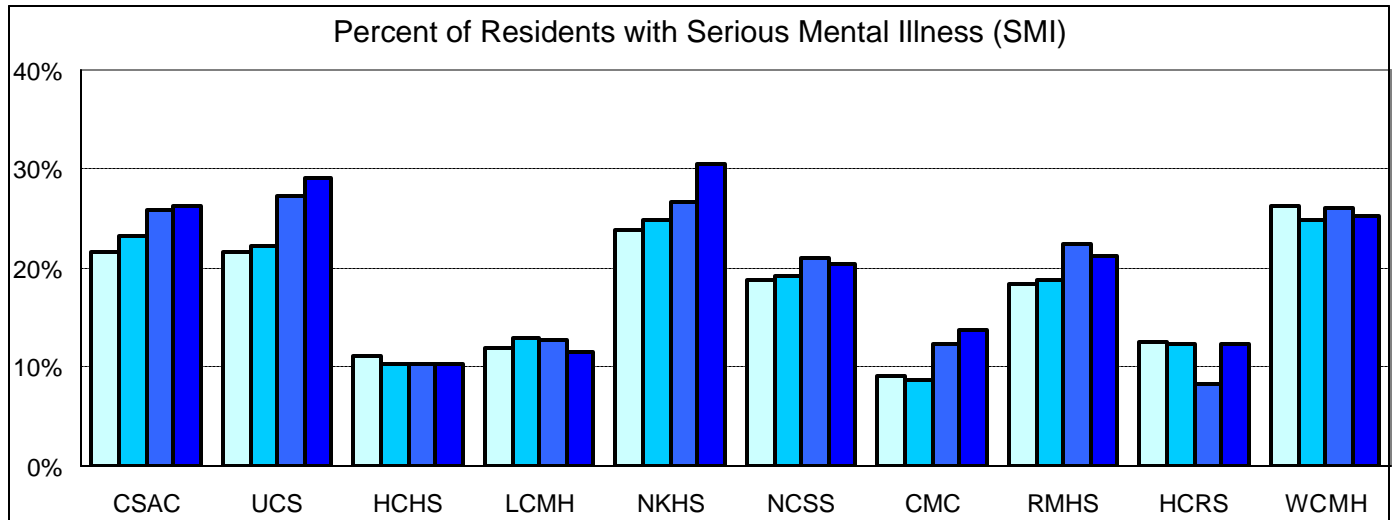
**ADULTS WITH DEPRESSION:** Utilization rates are based on a comparison of the estimated number of residents with depression and the number of people in the treatment population who have a diagnosis of depression. The estimate of the prevalence of depression is based on an ongoing Behavioral Risk Survey conducted by the Vermont Department of Health. The number of people with depression who were served is based on diagnosis reported by community providers.

**ADULTS WHO WERE MEDICAID ELIGIBLE:** Utilization rates are based on a comparison of the total number of Medicaid enrollees (from Vermont's EDS Medicaid database) with the number of adult mental health service recipients who were covered by Medicaid (from the "responsible for fee" field in the Quarterly Service Reports).

#### REFERENCE

1. Panidiani, J.A., Banks, S.M., Bramley J., Pomeroy S., Simon M. (2002). Measuring Access to Mental Health Care: A Multi-indicator Approach to Program Evaluation. *Evaluation and Program Planning*, 25; 271-285.

# **Access to Adult Mental Health Programs** **Adults with SMI and Medicaid Eligible Adults** **By Region, Vermont: FY1999 - FY2002**

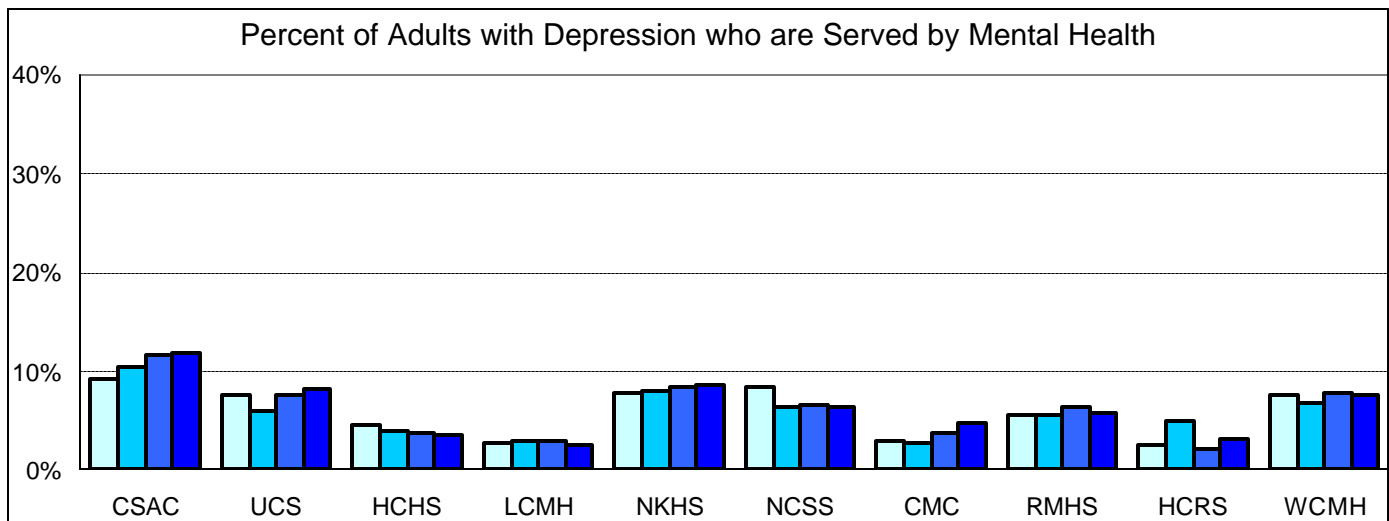
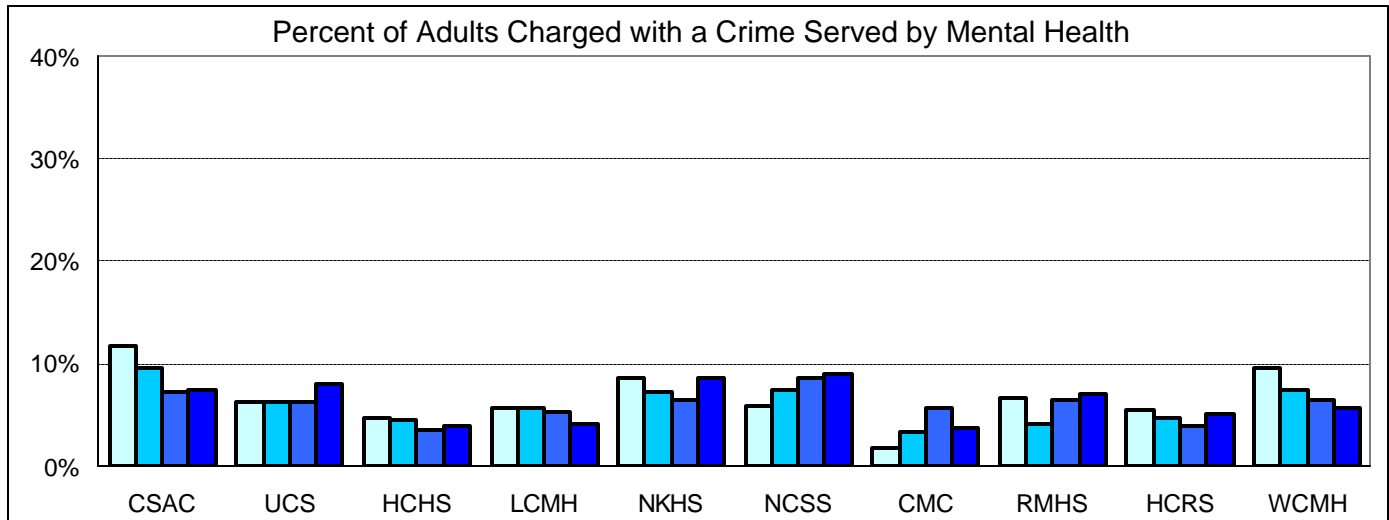


FY	Percent of Residents with Serious Mental Illness (SMI) Served by Mental Health									
	CSAC Addison	UCS Bennington	HCHS Chittenden	LCMH Lamoille	NKHS Northeast	NCSS Northwest	CMC Orange	RMHS Rutland	HCRS Southeast	WCMH Washington
1999	21.5%	21.6%	11.1%	11.9%	23.9%	18.8%	9.1%	18.5%	12.6%	26.2%
2000	23.2%	22.2%	10.3%	12.8%	24.9%	19.2%	8.6%	18.7%	12.3%	24.9%
2001	25.9%	27.2%	10.4%	12.7%	26.7%	20.9%	12.2%	22.3%	8.2%	26.1%
2002	26.1%	29.1%	10.2%	11.5%	30.5%	20.4%	13.7%	21.2%	12.3%	25.1%

FY	Percent of Medicaid Eligible Adults Served by Mental Health									
	CSAC	UCS	HCHS	LCMH	NKHS	NCSS	CMC	RMHS	HCRS	WCMH
1999	8.8%	9.2%	7.5%	5.1%	6.0%	6.3%	5.3%	8.0%	5.5%	10.2%
2000	9.7%	8.9%	7.1%	6.0%	5.8%	7.3%	4.8%	5.7%	5.0%	8.6%
2001	8.4%	9.5%	6.7%	4.1%	5.6%	6.5%	4.8%	5.3%	5.2%	9.1%
2002	8.3%	9.5%	6.1%	3.5%	6.0%	8.0%	6.6%	4.9%	4.2%	9.5%

Analysis is based on Monthly Service Reports submitted to DDMHS by the designated agencies and includes adults 18 and over who were assigned to Adult Outpatient and Community Rehabilitation and Treatment Programs.

# **Access to Adult Mental Health Programs** **Adults Charged with a Crime and Adults with Depression** **By Region, Vermont: FY1999 - FY2002**

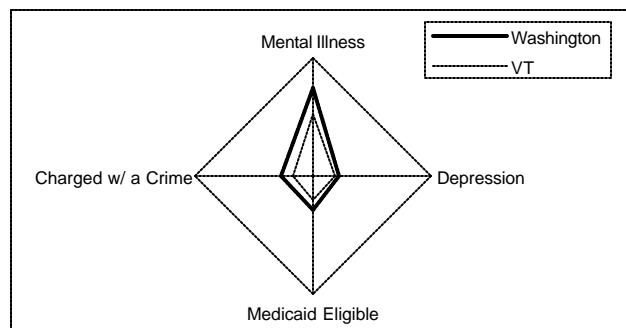
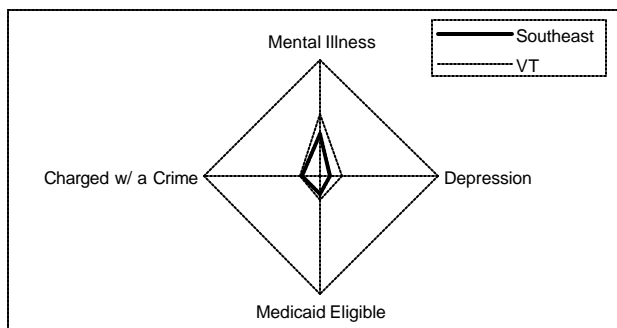
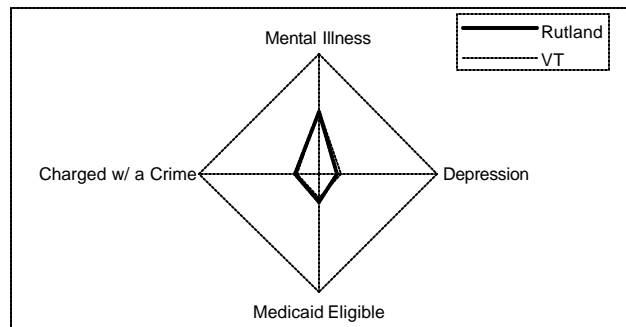
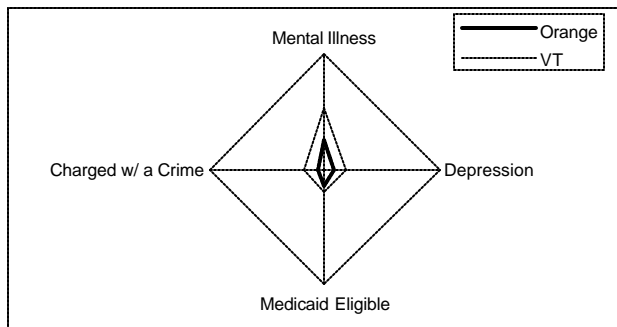
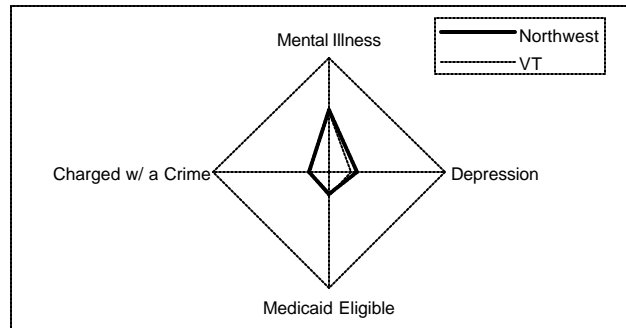
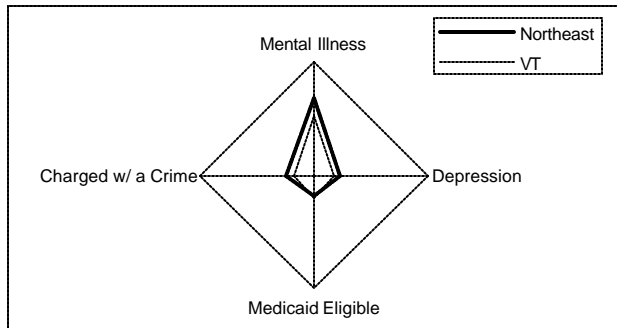
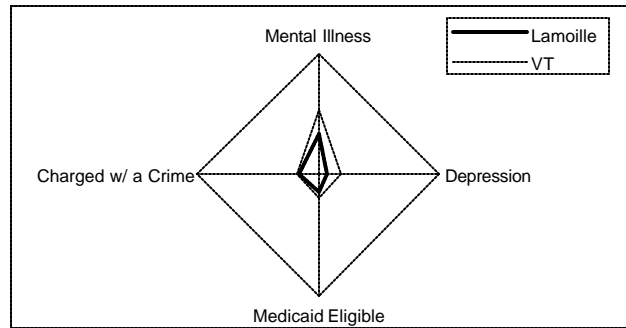
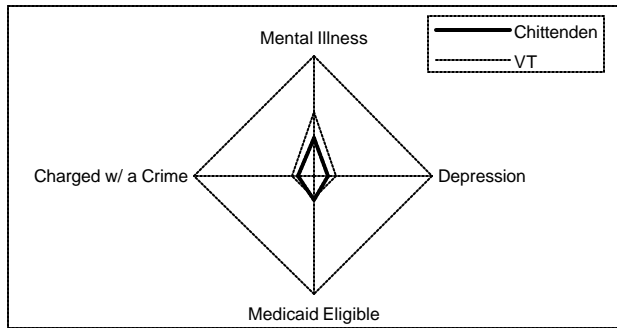
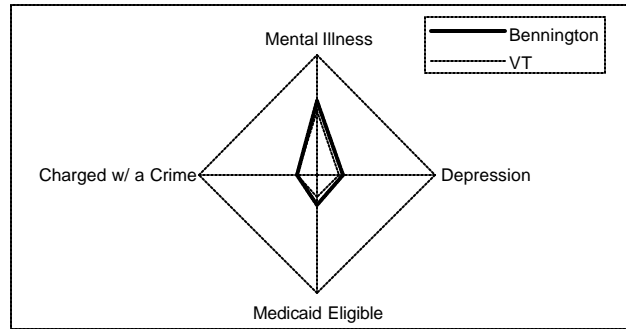
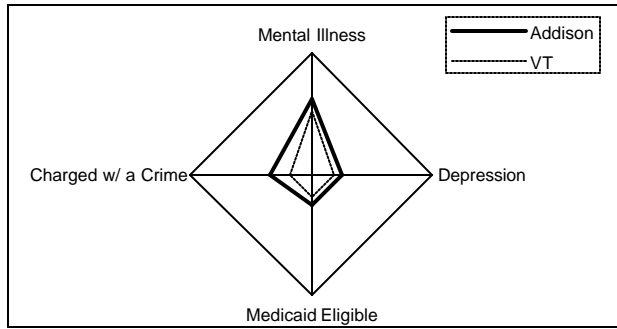


FY	Percent of Adults Charged with a Crime Served by Mental Health									
	CSAC Addison	UCS Bennington	HCHS Chittenden	LCMH Lamoille	NKHS Northeast	NCSS Northwest	CMC Orange	RMHS Rutland	HCRS Southeast	WCMH Washington
1999	11.7%	6.1%	4.6%	5.5%	8.7%	5.9%	1.7%	6.7%	5.5%	9.6%
2000	9.5%	6.3%	4.5%	5.7%	7.2%	7.4%	3.3%	4.0%	4.6%	7.4%
2001	7.1%	6.3%	3.4%	5.3%	6.5%	8.5%	5.6%	6.5%	3.8%	6.5%
2002	7.3%	7.9%	4.0%	4.1%	8.6%	9.0%	3.7%	6.9%	5.1%	5.6%

FY	Percent of Adults with Depression who are Served by Mental Health									
	CSAC	UCS	HCHS	LCMH	NKHS	NCSS	CMC	RMHS	HCRS	WCMH
1999	9.2%	7.6%	4.4%	2.6%	7.8%	8.3%	2.8%	5.4%	2.5%	7.6%
2000	10.3%	5.9%	4.0%	2.8%	7.9%	6.2%	2.7%	5.5%	4.9%	6.7%
2001	11.6%	7.5%	3.8%	2.9%	8.4%	6.6%	3.7%	6.4%	2.0%	7.7%
2002	11.9%	8.1%	3.5%	2.5%	8.6%	6.3%	4.8%	5.8%	3.1%	7.6%

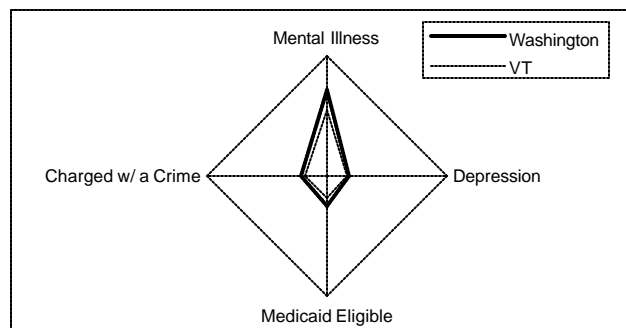
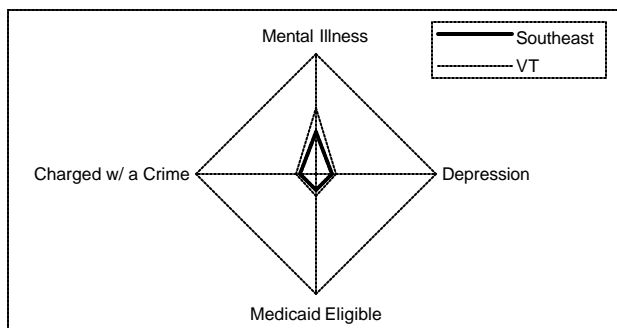
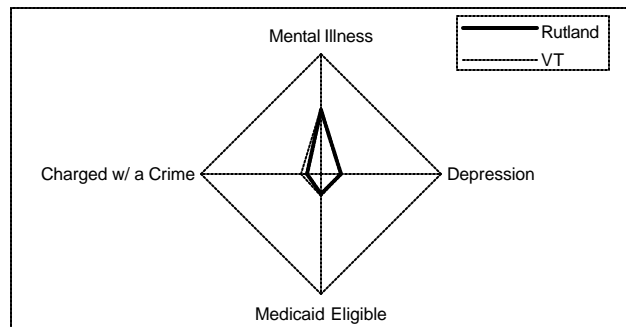
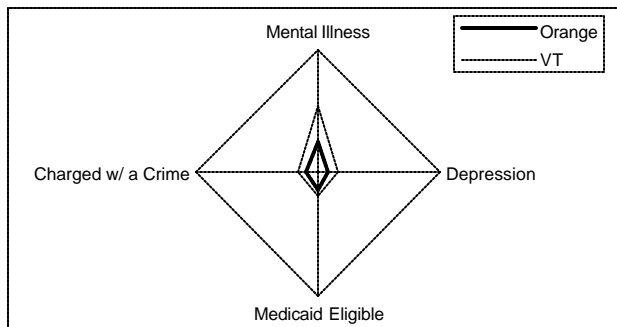
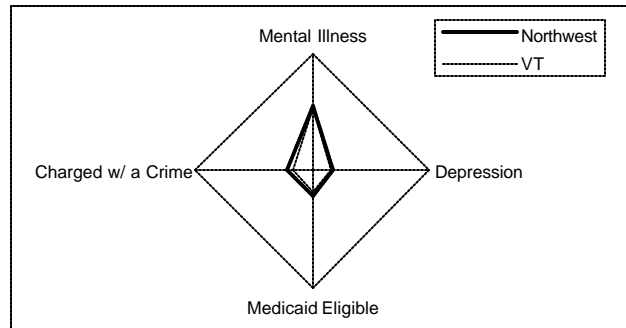
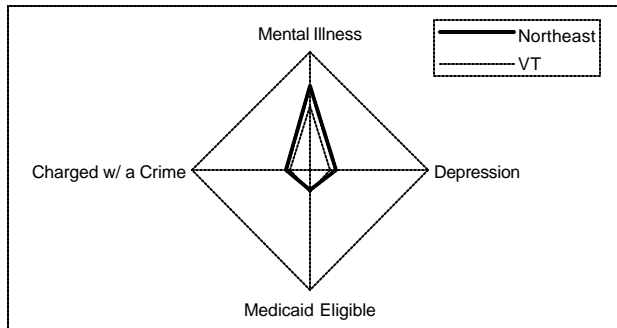
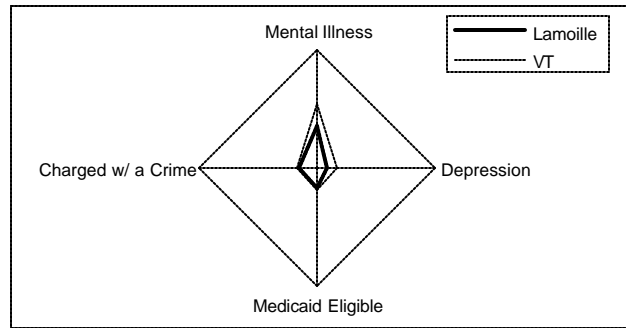
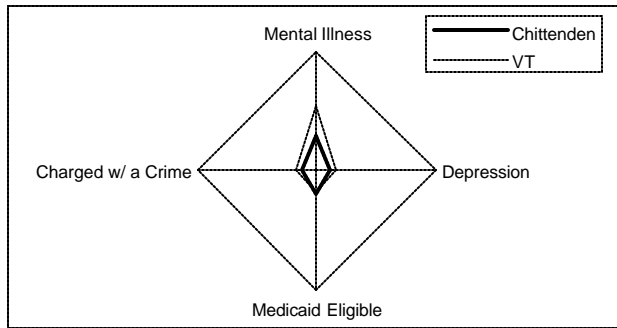
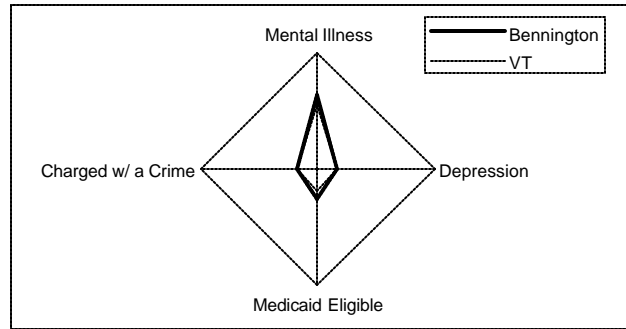
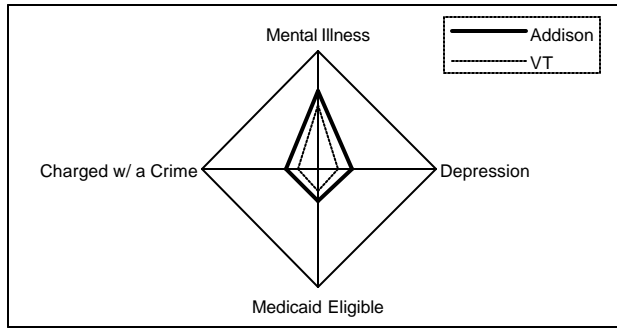
Analysis is based on Monthly Service Reports submitted to DDMHS by the designated agencies and includes adults 18 and over who were assigned to Adult Outpatient and Community Rehabilitation and Treatment Programs.

# **ACCESS TO ADULT MENTAL HEALTH SERVICES** **UTILIZATION RATES FOR SPECIAL POPULATIONS BY REGION, VERMONT: FY 1999**



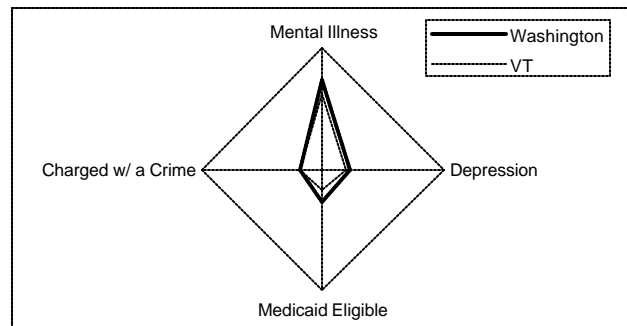
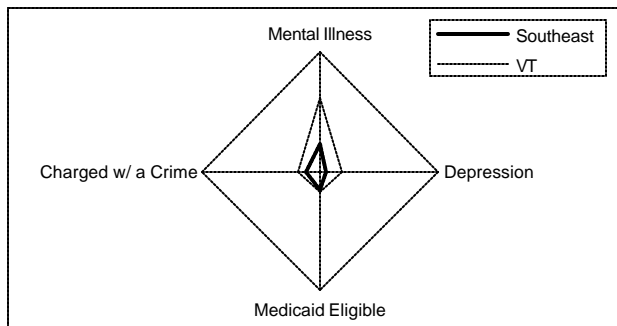
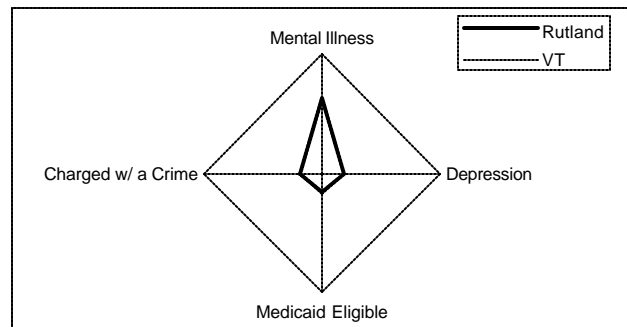
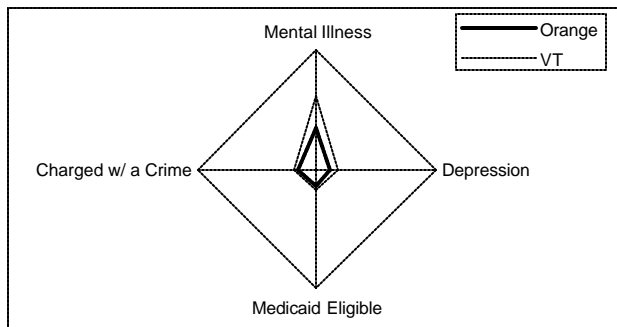
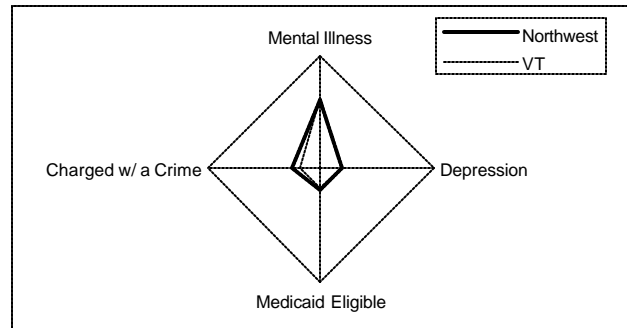
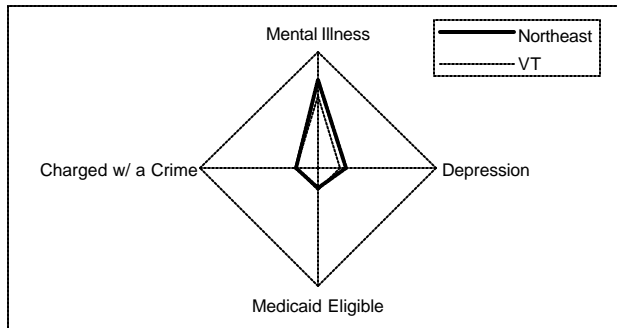
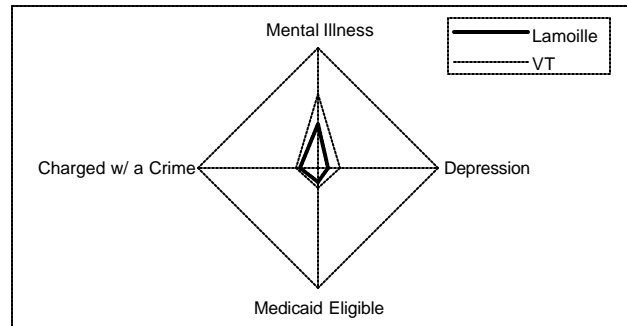
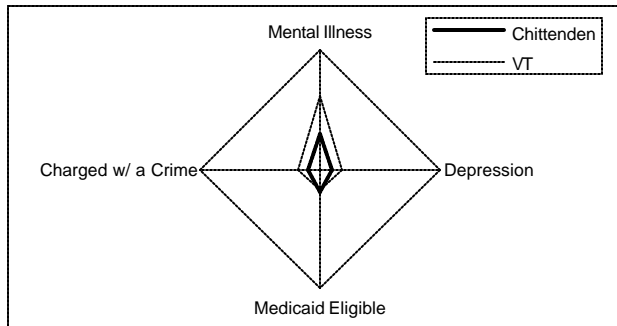
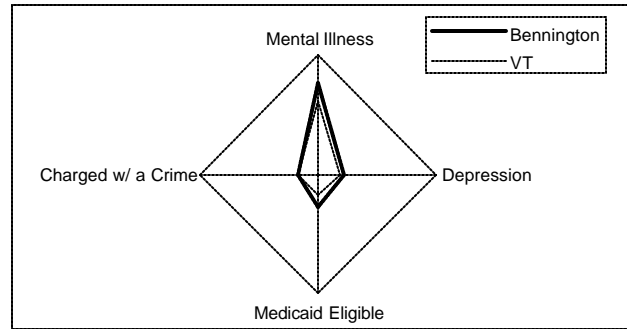
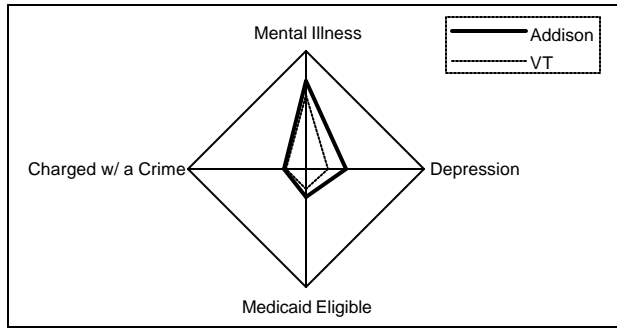
Each axis represents the per capita utilization rate for the specified group based on a scale of 0 - 35%. The intersection of the axis is 0.

# **ACCESS TO ADULT MENTAL HEALTH SERVICES UTILIZATION RATES FOR SPECIAL POPULATIONS BY REGION, VERMONT: FY 2000**



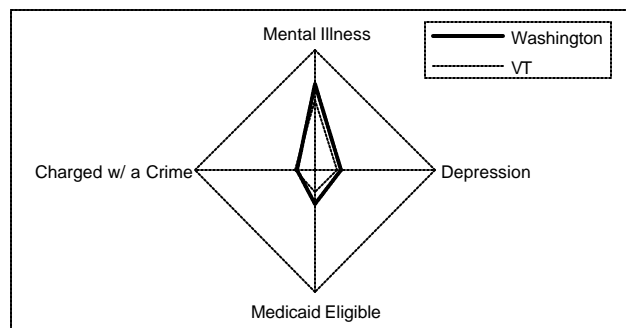
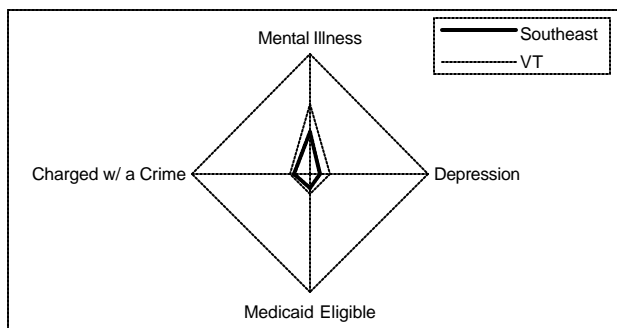
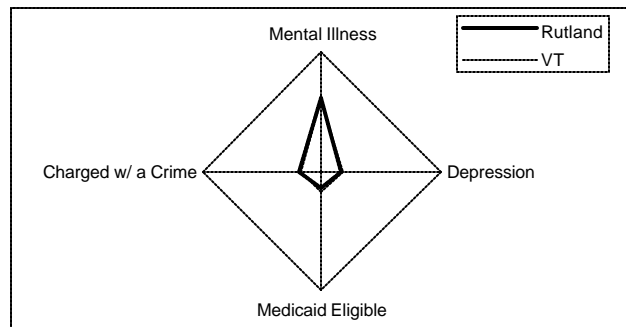
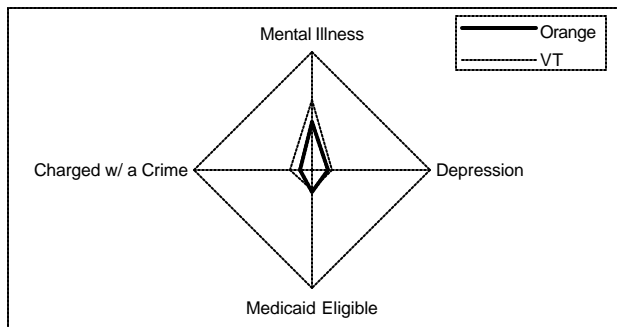
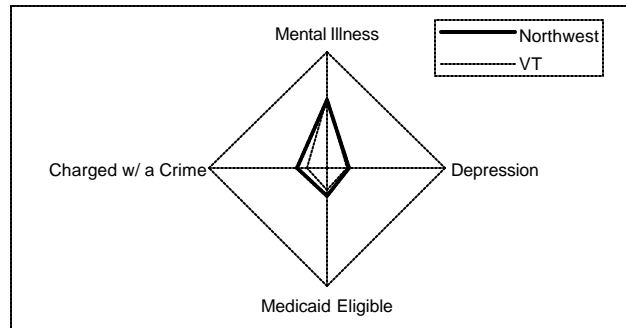
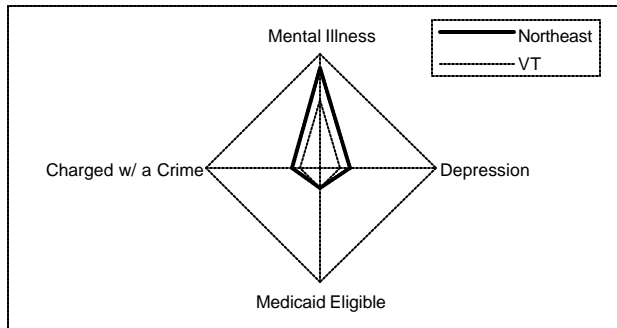
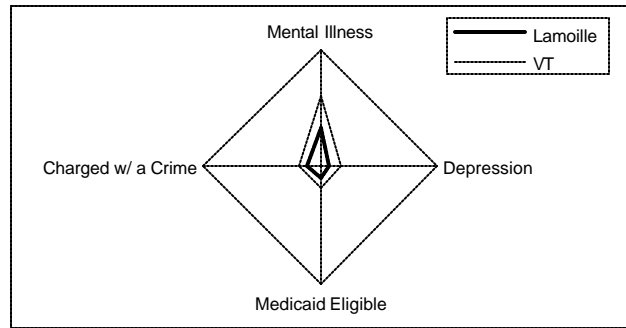
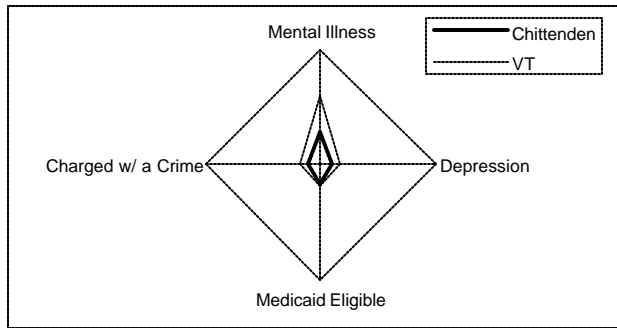
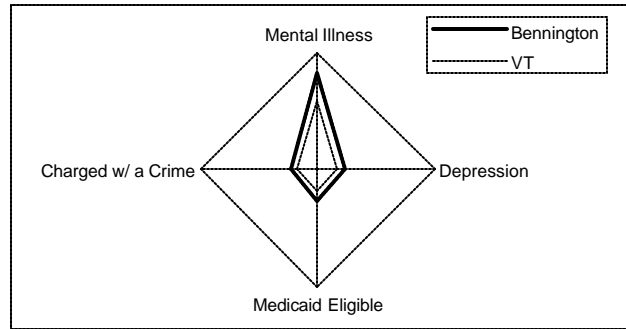
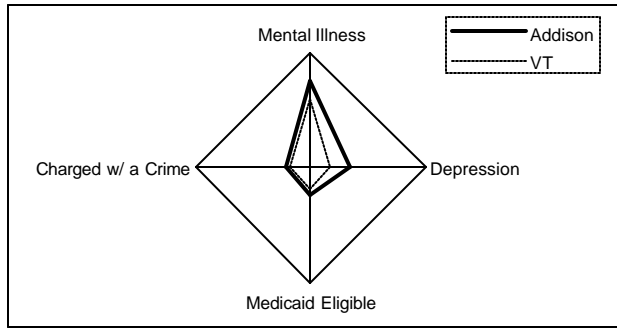
Each axis represents the per capita utilization rate for the specified group based on a scale of 0 - 35%. The intersection of the axis is 0.

# **ACCESS TO ADULT MENTAL HEALTH SERVICES UTILIZATION RATES FOR SPECIAL POPULATIONS BY REGION, VERMONT: FY 2001**



Each axis represents the per capita utilization rate for the specified group based on a scale of 0 - 35%. The intersection of the axis is 0.

# ACCESS TO ADULT MENTAL HEALTH SERVICES UTILIZATION RATES FOR SPECIAL POPULATIONS BY REGION, VERMONT: FY 2002



Each axis represents the per capita utilization rate for the specified group based on a scale of 0 - 35%. The intersection of the axis is 0.



# ACCESS TO ADULT MENTAL HEALTH SERVICES PEOPLE IN SPECIAL POPULATIONS, VERMONT: FY 1999

Region/Provider		With Depression	With Serious Mental Illness	Charged with a Crime	Medicaid Eligible	
Addison	- CSAC	Population	3,208 ± 848	1,564	568 ± 7	3,689
		Number Served	295	337	66 ± 7	326
		Percent Served	9.2% ± 2.4%	21.5%	11.7% ± 1.2%	8.8%
Bennington	- UCS	Population	4,094 ± 819	1,468	892 ± 10	5,071
		Number Served	311	317	55 ± 7	466
		Percent Served	7.6% ± 1.5%	21.6%	6.1% ± 0.8%	9.2%
Chittenden	- HCHS	Population	14,119 ± 2129	7,732	3203 ± 36	13,336
		Number Served	628	858	148 ± 26	994
		Percent Served	4.4% ± 0.7%	11.1%	4.6% ± 0.8%	7.5%
Lamoille	- LCMHS	Population	2,796 ± 774	1,038	577 ± 7	3,429
		Number Served	72	123	32 + 4	175
		Percent Served	2.6% ± 0.7%	11.9%	5.5% ± 0.6%	5.1%
Northeast	-NEK	Population	5,787 ± 1867	2,302	1454 ± 16	11,758
		Number Served	450	550	126 + 13	700
		Percent Served	7.8% ± 2.5%	23.9%	8.7% ± 0.9%	6.0%
Northwest	-NCSS	Population	5,393 ± 1987	2,063	1089 ± 13	7,445
		Number Served	448	388	64 ± 9	470
		Percent Served	8.3% ± 3.1%	18.8%	5.9% ± 0.9%	6.3%
Orange	- CMC	Population	3,962 ± 1100	1,458	382 ± 5	4,285
		Number Served	111	132	7 ± 1	225
		Percent Served	2.8% ± 0.8%	9.1%	1.7% ± 0.4%	5.3%
Rutland	-RACS	Population	6,521 ± 1071	2,579	1095 ± 12	9,818
		Number Served	354	476	73 ± 12	787
		Percent Served	5.4% + 0.9%	18.5%	6.7% + 1.1%	8.0%
Southeast	- HCRSSV	Population	9,265 + 1760	3,878	1882 + 21	11,083
		Number Served	230	488	103 ± 17	608
		Percent Served	2.5% + 0.5%	12.6%	5.5% + 0.9%	5.5%
Washington	- WCMHS	Population	6,572 + 1154	2,487	997 + 12	8,149
		Number Served	497	651	96 ± 11	834
		Percent Served	7.6% ± 1.3%	26.2%	9.6% ± 1.1%	10.2%
Statewide		Population	61,717 ± 4554	26,569	12,139 ± 51	78,063
		Number Served	3,396	4,320	770 ± 39	5,585
		Percent Served	5.5% ± 0.4%	16.3%	6.3% ± 0.3%	7.2%

# ACCESS TO ADULT MENTAL HEALTH SERVICES PEOPLE IN SPECIAL POPULATIONS, VERMONT: FY 2000

Region/Provider		With Depression	With Serious Mental Illness	Charged with a Crime	Medicaid Eligible	
Addison	- CSAC	Population	3,208 ± 848	1,564	557 ± 7	3,993
		Number Served	330	363	53 ± 6	387
		Percent Served	10.3% ± 2.7%	23.2%	9.5% ± 1.1%	9.7%
Bennington	- UCS	Population	4,094 ± 819	1,468	976 ± 11	5,554
		Number Served	242	326	61 ± 8	496
		Percent Served	5.9% ± 1.2%	22.2%	6.3% ± 0.8%	8.9%
Chittenden	- HCHS	Population	14,119 ± 2129	7,732	3643 ± 43	14,241
		Number Served	562	798	166 ± 23	1004
		Percent Served	4.0% ± 0.6%	10.3%	4.5% ± 0.6%	7.1%
Lamoille	- LCMHS	Population	2,796 ± 774	1,038	667 ± 8	3,773
		Number Served	79	133	38 + 3	227
		Percent Served	2.8% ± 0.8%	12.8%	5.7% ± 0.5%	6.0%
Northeast	-NEK	Population	5,787 ± 1867	2,302	1585 ± 17	12,750
		Number Served	455	574	114 + 13	737
		Percent Served	7.9% ± 2.5%	24.9%	7.2% ± 0.8%	5.8%
Northwest	-NCSS	Population	5,393 ± 1987	2,063	1093 ± 13	7,900
		Number Served	337	396	81 ± 10	575
		Percent Served	6.2% ± 2.3%	19.2%	7.4% ± 1.0%	7.3%
Orange	- CMC	Population	3,962 ± 1100	1,458	493 ± 6	4,634
		Number Served	108	126	16 ± 2	223
		Percent Served	2.7% ± 0.8%	8.6%	3.3% ± 0.4%	4.8%
Rutland	-RACS	Population	6,521 ± 1071	2,579	1384 ± 16	10,621
		Number Served	361	483	56 ± 11	608
		Percent Served	5.5% + 0.9%	18.7%	4.0% + 0.8%	5.7%
Southeast	- HCRSSV	Population	9,265 + 1760	3,878	2199 + 25	12,417
		Number Served	454	478	102 ± 18	618
		Percent Served	4.9% + 0.9%	12.3%	4.6% + 0.8%	5.0%
Washington	- WCMHS	Population	6,572 + 1154	2,487	1113 + 13	8,672
		Number Served	442	618	82 ± 9	748
		Percent Served	6.7% ± 1.2%	24.9%	7.4% ± 0.8%	8.6%
Statewide		Population	61,717 ± 4554	26,569	13,711 ± 60	84,555
		Number Served	3,370	4,295	767 ± 39	5,623
		Percent Served	5.5% ± 0.4%	16.2%	5.6% ± 0.3%	6.7%

# ACCESS TO ADULT MENTAL HEALTH SERVICES PEOPLE IN SPECIAL POPULATIONS, VERMONT: FY 2001

Region/Provider		With Depression	With Serious Mental Illness	Charged with a Crime	Medicaid Eligible	
Addison	- CSAC	Population	3,208 ± 848	1,564	730 ± 9	4,425
		Number Served	371	405	52 ± 7	373
		Percent Served	11.6% ± 3.1%	25.9%	7.1% ± 1.0%	8.4%
Bennington	- UCS	Population	4,094 ± 819	1,468	958 ± 11	6,125
		Number Served	308	399	60 ± 8	583
		Percent Served	7.5% ± 1.5%	27.2%	6.3% ± 0.8%	9.5%
Chittenden	- HCHS	Population	14,119 ± 2129	7,732	3791 ± 44	15,554
		Number Served	534	803	130 ± 25	1035
		Percent Served	3.8% ± 0.6%	10.4%	3.4% ± 0.7%	6.7%
Lamoille	- LCMHS	Population	2,796 ± 774	1,038	649 ± 8	4,180
		Number Served	82	132	35 + 4	172
		Percent Served	2.9% ± 0.8%	12.7%	5.3% ± 0.6%	4.1%
Northeast	-NEK	Population	5,787 ± 1867	2,302	1528 ± 18	13,977
		Number Served	484	615	99 + 12	784
		Percent Served	8.4% ± 2.7%	26.7%	6.5% ± 0.8%	5.6%
Northwest	-NCSS	Population	5,393 ± 1987	2,063	1283 ± 14	8,743
		Number Served	357	432	109 ± 12	570
		Percent Served	6.6% ± 2.4%	20.9%	8.5% ± 0.9%	6.5%
Orange	- CMC	Population	3,962 ± 1100	1,458	519 ± 6	5,100
		Number Served	147	178	29 ± 3	246
		Percent Served	3.7% ± 1.0%	12.2%	5.6% ± 0.6%	4.8%
Rutland	-RACS	Population	6,521 ± 1071	2,579	1397 ± 16	11,773
		Number Served	415	576	90 ± 13	624
		Percent Served	6.4% + 1.0%	22.3%	6.5% + 0.9%	5.3%
Southeast	- HCRSSV	Population	9,265 + 1760	3,878	2471 + 27	14,276
		Number Served	187	318	94 ± 15	747
		Percent Served	2.0% + 0.4%	8.2%	3.8% + 0.6%	5.2%
Washington	- WCMHS	Population	6,572 + 1154	2,487	1281 + 15	9,489
		Number Served	506	648	83 ± 11	863
		Percent Served	7.7% ± 1.4%	26.1%	6.5% ± 0.8%	9.1%
Statewide		Population	61,717 ± 4554	26,569	14,608 ± 64	93,642
		Number Served	3,391	4,506	780 ± 40	5,997
		Percent Served	5.5% ± 0.4%	17.0%	5.3% ± 0.3%	6.4%

# ACCESS TO ADULT MENTAL HEALTH SERVICES PEOPLE IN SPECIAL POPULATIONS, VERMONT: FY 2002

Region/Provider		With Depression	With Serious Mental Illness	Charged with a Crime	Medicaid Eligible	
Addison	- CSAC	Population	3,208 ± 848	1,564	587 ± 7	4,509
		Number Served	381	409	43 ± 6	373
		Percent Served	11.9% ± 3.1%	26.1%	7.3% ± 1.1%	8.3%
Bennington	- UCS	Population	4,094 ± 819	1,468	774 ± 9	6,264
		Number Served	331	428	61 ± 7	596
		Percent Served	8.1% ± 1.6%	29.1%	7.9% ± 0.9%	9.5%
Chittenden	- HCHS	Population	14,119 ± 2129	7,732	3514 ± 38	15,889
		Number Served	500	789	139 ± 22	973
		Percent Served	3.5% ± 0.5%	10.2%	4.0% ± 0.6%	6.1%
Lamoille	- LCMHS	Population	2,796 ± 774	1,038	520 ± 6	4,193
		Number Served	71	119	21 + 3	148
		Percent Served	2.5% ± 0.7%	11.5%	4.1% ± 0.5%	3.5%
Northeast	-NEK	Population	5,787 ± 1867	2,302	1261 ± 14	14,295
		Number Served	500	703	109 + 13	857
		Percent Served	8.6% ± 2.8%	30.5%	8.6% ± 1.0%	6.0%
Northwest	-NCSS	Population	5,393 ± 1987	2,063	1289 ± 14	8,818
		Number Served	340	420	116 ± 12	704
		Percent Served	6.3% ± 2.3%	20.4%	9.0% ± 0.9%	8.0%
Orange	- CMC	Population	3,962 ± 1100	1,458	442 ± 5	5,126
		Number Served	189	200	16 ± 4	336
		Percent Served	4.8% ± 1.3%	13.7%	3.7% ± 0.8%	6.6%
Rutland	-RACS	Population	6,521 ± 1071	2,579	1075 ± 11	11,809
		Number Served	375	548	74 ± 11	574
		Percent Served	5.8% + 0.9%	21.2%	6.9% + 1.0%	4.9%
Southeast	- HCRSSV	Population	9,265 + 1760	3,878	2008 + 21	14,603
		Number Served	287	478	102 ± 14	611
		Percent Served	3.1% + 0.6%	12.3%	5.1% + 0.7%	4.2%
Washington	- WCMHS	Population	6,572 + 1154	2,487	1109 + 12	9,540
		Number Served	497	625	62 ± 9	902
		Percent Served	7.6% ± 1.3%	25.1%	5.6% ± 0.8%	9.5%
Statewide		Population	61,717 ± 4554	26,569	12,579 ± 53	95,046
		Number Served	3,471	4,719	745 ± 36	6,074
		Percent Served	5.6% ± 0.4%	17.8%	5.9% ± 0.3%	6.4%